

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
11 August 2005 (11.08.2005)

PCT

(10) International Publication Number
WO 2005/073034 A1

(51) International Patent Classification⁷:

B60R 21/01

(21) International Application Number:

PCT/SE2005/000051

(22) International Filing Date: 19 January 2005 (19.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0402246.3 2 February 2004 (02.02.2004) GB

(71) Applicant (for all designated States except US): **AUTOLIV DEVELOPMENT AB [SE/SE]**; S-447 83 Vårgårda (SE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **LENNING, Anders** [SE/SE]; Karsjö, Karsjövägen 32, S-434 97 Kungsbacka (SE).

(74) Agent: **MEULLER, Erik**; Autoliv Development AB, S-447 83 Vårgårda (SE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

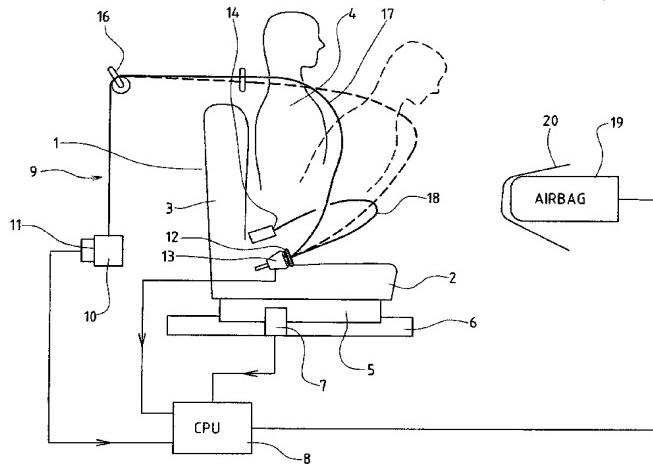
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A SAFETY ARRANGEMENT



(57) Abstract: A safety arrangement for detecting the position of an occupant (4) of a seat (1) which is provided with a safety belt (9) which is mounted on a retractor (10) includes a sensor (11) which measures the length of belt withdrawn from the retractor. The sensor is associated with a processor unit (8) which is associated with a seat position sensor (7). By determining the position of the seat and by determining the minimum length of belt paid-out from the retractor (10) after the seat belt has been buckled in position, and by determining how additional belt has been paid-out at any incident, the position of the seat occupant (4) relative to an air-bag (19) can be determined. If the seat occupant is very close to the air-bag, the nature of deployment of the air-bag can be moderated by the central processor unit (8).

WO 2005/073034 A1